REMARKS

Applicant respectfully requests reconsideration and allowance of the subject application. Claims 16, 21, 34, and 50 are amended. Claims 23, 47, 48, 49, and 51 are canceled without prejudice. New claims 52-54 are added. Claims 1-22, 24-46, 50, and 52-54 are pending in this application.

35 U.S.C. § 102

Claims 16, 19, 21, 24, 29, and 30 stand rejected under 35 U.S.C. §102(b) as being unpatentable over U.S. Patent No. 5,805,204 to Thompson et al. (hereinafter "Thompson"). Applicant respectfully submits that claims 16, 19, 21, 24, 29, and 30, as amended, are not anticipated by Thompson.

Thompson discloses a system in which program information or data is gathered and communicated to one or more local head end computers via satellite transmission (see, Fig. 1 and col. 4, lines 48-61). At the local head end computer, the data is formatted and transmitted over a CATV system to a decoder unit at the customer's TV set where the data can be presented on the user's TV (see, Fig. 1 and col. 4, lines 61-67). Thompson further discloses that smart cards can be used to encrypt the data at the local head end before it is transmitted to the customer's TV set, and then decrypted by the decoder unit in the customer's TV set after receipt from the local head end (see, Figs. 6 and 7, and col. 7, lines 10-14).

In contrast, amended claim 16 recites:

A method of encrypting media content **received at a user's home from a programming source**, the method comprising:
checking, **at the user's home**, whether a smart card is authorized to encrypt the media content; and

encrypting, **at the user's home**, the media content only if the smart card is authorized to encrypt the media content.

See, emphasis added, lines 1-6. Applicant respectfully submits that Thompson does not disclose or suggest encrypting media content at a user's home only if a smart card is authorized to encrypt the media content as claimed in amended claim 16. Thompson, as discussed above, is directed to encrypting content for the transfer from the local headend of a CATV system to the customer's TV set, not encrypting content after it is received at the user's home. In other words, Thompson is directed to encrypting content for secure transfer to the user's home, whereas amended claim 16 is directed to encrypting content at the user's home (and thus allowing secure handling of the content at the user's home). Applicant respectfully submits that nowhere in Thompson is there any discussion or suggestion of encrypting media content at a user's home only if a smart card is authorized to encrypt the media content as claimed in amended claim 16. For at least these reasons, Applicant respectfully submits that amended claim 16 is allowable over Thompson.

With respect to claim 21, amended claim 21 recites:

determining that the smart card is authorized to decrypt the media content only if data other than electronic money is stored on the smart card, wherein the data is expected to be of value to a user;

See, lines 3-5. Applicant respectfully submits that Thompson does not disclose or suggest, and is not cited as disclosing or suggesting, determining that a smart card is authorized to decrypt media content only if data other than electronic money is stored on the smart card, wherein the data is expected to be of value to a user as claimed in amended claim 21.

In the May 23 Office Action U.S. Patent No. 5,666,412 to Handelman et al. (hereinafter "Handelman") was cited as disclosing "the smart card with memory unit to store a user-specific information (i.e., parental control, access seeds) and to store a data that is value to the user (billing information)" (see, ¶6, p. 4). Handelman discloses a CATV system that uses two smart cards: a main card and a parent card. If only the main card is inserted into the decoder, then no restricted programs are decrypted. If only the parent card is inserted into the decoder, then no programs at all are decrypted. If both the main card and the parent card are inserted into the decoder, then both restricted and non-restricted programs are decrypted. See, col. 7, lines 38-53. Handelman also discloses that billing data for restricted as well as non-restricted programs can also be kept in the main card (see, col. 7, lines 54-62).

Applicant respectfully submits, however, that there is no disclosure or suggestion in Handelman of determining that a smart card is authorized to decrypt media content only if data other than electronic money is stored on the smart card as claimed in amended claim 21. Handelman discloses keeping billing data on a smart card, but the only restriction on decryption in Handelman is whether the main and/or parent cards are present – nothing in Handelman ties restricting decryption to whether the billing information is stored on the card. Applicant respectfully submits that the mere disclosure of keeping billing data on a smart card as disclosed in Handelman does not disclose or suggest making a determination that a smart card is authorized to decrypt media content because of the data stored on the smart card, as claimed in amended claim 21.

For at least these reasons, Applicant respectfully submits that amended claim 21 is allowable over the cited references.

With respect to claim 29, claim 29 recites:

> encrypting the received media content **based on a household identifier** corresponding to a smart card;

See, emphasis added, lines 4-5. Applicant respectfully submits that Thompson does not disclose or suggest encrypting received media content based on a household identifier. Thompson discloses that each receiver must be able to use the same key to decode the data stream (see, col. 3, lines 16-18). Thompson is directed to keeping users without the smart cards from accessing the data being delivered to customer's TV sets, but there is no discussion of making the encryption household-specific. In contrast, claim 29 recites encrypting the received media content is based on a household identifier corresponding to a smart card, thereby tying the content to a particular household. Applicant respectfully submits that nowhere in Thompson is there any discussion or suggestion of making the media content encryption household-specific as claimed in claim 29 (if the encryption were household-specific, the requirement of Thompson that each receiver be able to use the same key to decode the stream would be violated). For at least these reasons, Applicant respectfully submits that claim 29 is allowable over Thompson.

Given that claim 19 depends from amended claim 16, claim 24 depends from amended claim 21, and claim 30 depends from claim 29, Applicant respectfully submits that claims 19, 24, and 30 are likewise allowable over Thompson for at least the reasons discussed above.

Claims 34-36 stand rejected under 35 U.S.C. §102(b) as being unpatentable over Handelman. Applicant respectfully submits that claims 34-36, as amended, are not anticipated by Handelman.

With respect to claim 34, amended claim 34 recites:

> comparing a rating corresponding to the media content to a rating associated with a smart card; and
> allowing access to the media content if the rating corresponding to the media content does not exceed the rating associated with the smart card, wherein a plurality of ratings do not exceed the rating associated with the smart card.

See, lines 3-7.

Handelman discloses the use of two cards: a main card and a parent card. If only the main card is inserted into the decoder, then no restricted programs are decrypted. If only the parent card is inserted into the decoder, then no programs at all are decrypted. If both the main card and the parent card are inserted into the decoder, then both restricted and non-restricted programs are decrypted. Thus, in the system of Handelman, only one card is required to decrypt non-restricted programs, but both cards are required to decrypt both restricted and non-restricted programs. In contrast, the method of amended claim 34 allows access to media content for multiple ratings that do not exceed the rating associated with the card. Handelman does not disclose or suggest allowing such multiple levels of control. In Handelman the main card can only decrypt one type of program (non-restricted programs), and <u>both</u> main and parent cards are required to decrypt two types of programs (both restricted and non-restricted programs) – the parent card alone cannot decrypt any content. Thus, Handelman does not allow access to the media content if the rating corresponding to the media content does not exceed the rating

associated with the smart card as claimed in amended claim 34 (Handelman would require the insertion of two cards before allowing access).

For at least these reasons, Applicant respectfully submits that amended claim 34 is allowable over Handelman.

With respect to claim 35, claim 35 depends from amended claim 34 and Applicant thus submits that claim 35 is allowable over Handelman for at least the reasons discussed above with respect to amended claim 34. Furthermore, claim 35 recites "wherein the rating associated with the smart card is stored on the smart card". Applicant respectfully submits that Handelman does not disclose or suggest the rating associated with a smart card being stored on the smart card. Handelman, as discussed above, discloses two different cards: a main card (for decrypting non-restricted programs) and a parent card (for decrypting restricted programs when combined with the main card). Handelman also discloses that billing data for both restricted programs and non-restricted programs may be stored on the main card (see, col. 7, lines 55-63, and col. 3, lines 18-23). However, storing such billing data is different from storing a rating associated with the smart card on the smart card as claimed in claim 35. The billing data is simply that – data regarding billing for programs. Applicant respectfully submits that the mere disclosure of storing billing data on a smart card does not disclose or suggest storing a rating associated with a smart card on the smart card, and using that stored rating as a basis for determining whether to allow access to media content as claimed in claim 35. For at least these reasons, Applicant respectfully submits that claim 35 is allowable over Handelman.

Given that claim 36 depends from amended claim 34, Applicant respectfully submits that claim 36 is likewise allowable over Handelman for at least the reasons discussed above.

Applicant respectfully requests that the §102 rejections be withdrawn.

35 U.S.C. § 103

Claims 1, 2, 5-8, 9-14, 20, 25-28, 31-33, 37-50 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Handelman in view of Thompson. Claims 47, 48, and 49 have been canceled without prejudice, thereby rendering the rejection of claim 47, 48, and 49 moot. Applicant respectfully submits that claims 1, 2, 5-8, 9-14, 20, 25-28, 31-33, 37-46, and 50, as amended, are not obvious over Handelman in view of Thompson.

With respect to claim 1, claim 1 is directed to a smart card including "a user-specific information storage section to store user preferences". Applicant respectfully submits that neither Handelman nor Thompson discloses or suggests a user-specific information storage section to store user preferences as claimed in claim 1. With respect to Handelman, Handelman discloses that the main card and the parent card are operative to participate in any of an authentication procedure, a validation procedure and a verification procedure and to provide program entitlements (see, col. 7, lines 28-33). Handelman also discloses that billing data for both restricted programs and non-restricted programs may be stored on the main card (see, col. 7, lines 55-63, and col. 3, lines 18-23). However, such procedures and billing data are not user preferences. Furthermore, Applicant respectfully submits that nowhere in Handelman is there any discussion of user

preferences as claimed in claim 1. With respect to Thompson, Applicant respectfully submits that Thompson does not disclose or suggest, and is not cited as disclosing or suggesting, a user-specific information storage section to store user preferences as claimed in claim 1.

Furthermore, Applicant respectfully submits that, analogous to the discussion above regarding claim 29, Thompson does not disclose or suggest a key associated with a household to be used to encrypt and decrypt media content as claimed in claim 1.

Thus, for at least these reasons, Applicant respectfully submits that claim 1 is allowable over Handelman in view of Thompson.

With respect to claim 7, claim 7 depends from claim 1 and Applicant thus submits that claim 7 is allowable over Handelman in view of Thompson for at least the reasons discussed above with respect to claim 1. Furthermore, Applicant respectfully submits that, analogous to the discussion above regarding claim 35, Handelman does not disclose or suggest a memory unit of a smart card including a rating associated with the smart card that is used to compare the rating with a rating corresponding to the media content and determine, based on the comparison, whether to allow access to the media content as claimed in claim 7. Additionally, Thompson does not disclose or suggest, and is not cited as disclosing or suggesting, such a memory unit including a rating associated with the smart card as claimed in claim 7. Thus, for at least these reasons, Applicant respectfully submits that claim 7 is allowable over Handelman in view of Thompson.

With respect to claim 9, Applicant respectfully submits that, analogous to the discussion above regarding claim 29, Thompson does not disclose or suggest a

key associated with a household to be used to encrypt and decrypt media content associated with the household as claimed in claim 9. Furthermore, Applicant respectfully submits that Handelman is not cited as curing this deficiency of Thompson, and that Handelman does not cure this deficiency of Thompson. Thus, for at least these reasons, Applicant respectfully submits that claim 9 is allowable over Handelman in view of Thompson.

With respect to claim 14, Applicant respectfully submits that claim 14 depends from claim 9 and thus that claim 14 is allowable over Handelman in view of Thompson for at least the reasons discussed above with respect to claim 9. Furthermore, analogous to the discussion above regarding claim 1, Applicant respectfully submits that there is no disclosure or suggestion in Handelman of a user-specific information storage section to store user preferences as claimed in claim 14. Applicant further submits that Thompson is not cited as curing this deficiency of Handelman, and that Thompson does not cure this deficiency of Handelman. Thus, for at least these reasons, Applicant respectfully submits that claim 14 is allowable over Handelman in view of Thompson.

With respect to claim 20, claim 20 depends from claim 16 and thus Applicant respectfully submits that claim 20 is allowable over Thompson for at least the reasons discussed above with reference to claim 16. Handelman is not cited as curing the deficiencies, and does not cure the deficiencies, of Thompson with respect to claim 16, and Applicant thus respectfully submits that, for at least these reasons, claim 20 is allowable over Handelman in view of Thompson.

With respect to claim 25, claim 25 depends from claim 21 and thus Applicant respectfully submits that claim 25 is allowable over Thompson for at

least the reasons discussed above with reference to claim 21. Handelman is not cited as curing the deficiencies, and does not cure the deficiencies, of Thompson with respect to claim 21, and Applicant thus respectfully submits that, for at least these reasons, claim 25 is allowable over Handelman in view of Thompson.

With respect to claim 26, claim 26 recites "a plurality of smart cards, each to be used for encrypting different categories of media content". In contrast, as discussed above Handelman discloses two cards: a main card and a parent card. Handelman discloses that the main card is needed for decrypting both levels of content, whereas the parent card is used only for decrypting restricted content. Regardless of the type of content to be decrypted, the main card is required in Handelman. Therefore, each of the cards in Handelman is not to be used for encrypting different categories of media content (the main card is required for decrypting all categories of content in Handelman).

Applicant respectfully submits that Thompson is not cited as curing this deficiency of Handelman, and furthermore that Thompson does not cure this deficiency of Handelman. For at least these reasons, Applicant respectfully submits that claim 26 is allowable over Thompson in view of Handelman.

With respect to claims 31-33, claims 31-33 depend from claim 29 and thus Applicant respectfully submits that claims 31-33 are allowable over Thompson for at least the reasons discussed above with reference to claim 29. Handelman is not cited as curing the deficiencies, and does not cure the deficiencies, of Thompson with respect to claims 31-33, and Applicant thus respectfully submits that, for at least these reasons, claims 31-33 are allowable over Handelman in view of Thompson.

With respect to claim 37, claim 37 depends from claim 34 and thus Applicant respectfully submits that claim 34 is allowable over Handelman for at least the reasons discussed above with reference to claim 34. Thompson is not cited as curing the deficiencies, and does not cure the deficiencies, of Handelman with respect to claim 34, and Applicant thus respectfully submits that, for at least these reasons, claim 37 is allowable over Handelman in view of Thompson.

With respect to claim 38, Applicant respectfully submits that, analogous to the discussion above regarding claim 1, Handelman in view of Thompson does not disclose or suggest controlling encryption of the received media content based on a household identifier corresponding to a smart card or maintaining user preferences information on the smart card as claimed in claim 38. For at least these reasons, Applicant respectfully submits that claim 38 is allowable over Handelman in view of Thompson.

With respect to claim 40, Applicant respectfully submits that, analogous to the discussion above regarding claim 1, Handelman in view of Thompson does not disclose or suggest a key, associated with a household, to be used to encrypt and decrypt media content associated with the household, or a user-specific information storage section to store user preferences as claimed in claim 40. For at least these reasons, Applicant respectfully submits that claim 40 is allowable over Handelman in view of Thompson.

With respect to claim 45, Applicant respectfully submits that, analogous to the discussion above regarding claim 1, Handelman in view of Thompson does not disclose or suggest maintaining, on a smart card, information regarding a user's preferences corresponding to media content, or maintaining, on a smart card, a key

to be used to encrypt and decrypt media content associated with a household as claimed in claim 45. For at least these reasons, Applicant respectfully submits that claim 45 is allowable over Handelman in view of Thompson.

With respect to claim 50, claim 50 has been amended to incorporate the elements of its base claim (claim 47). Applicant respectfully submits that neither Handelman nor Thompson, individually or in combination, discloses or suggests encrypting media content based on an identifier corresponding to a plurality of smart cards, and limiting rendering of the media content to a network of devices to which the plurality of smart cards are coupled, wherein the network of devices is maintained within a single house as claimed in claim 50. Analogous to the discussion above regarding claim 29, Thompson is directed to keeping users without the smart cards from accessing the data being delivered to customer's TV sets, not limiting rendering of media content to a network of devices within a single house as claimed in claim 50. Handelman is not cited as curing this deficiency of Thompson, and furthermore does not cure this deficiency of Thompson. For at least these reasons, Applicant respectfully submits that claim 50 is allowable over Handelman in view of Thompson.

Given that claims 2, 5, 6, and 8 depend from claim 1, claims 10-13 depend from claim 9, claims 27-28 depend from claim 26, claim 39 depends from claim 38, claims 41-44 depend from claim 40, claim 46 depends from claim 45, Applicant respectfully submits that claims 2, 5, 6, 8, 10-13, 27-28, 39, 41-44, and 46 are likewise allowable over Handelman in view of Thompson for at least the reasons discussed above.

Claims 3-4, 15, 17-18, 22-23, and 51 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Handelman in view of Thompson and U.S. Patent No. 5,744,787 to Teicher (hereinafter "Teicher"). Claims 23 and 51 have been canceled without prejudice, thereby rendering the rejection of claims 23 and 51 moot. Applicant respectfully submits that claims 3-4, 15, 17-18, and 22 are not obvious over Handelman in view of Thompson and Teicher.

Claims 3-4 depend from claim 1, claim 15 depends from claim 9, claims 17-18 depend from claim 16, and claim 22 depends from claim 21. Applicant respectfully submits that Teicher is not cited as curing, and does not cure, the deficiencies of Handelman and Thompson as discussed above with reference to claims 1, 9, 16, and 21. Thus, for at least these reasons, Applicant respectfully submits that claims 3-4, 15, 17-18, and 22 are allowable over Handelman in view of Thompson and Teicher.

Applicant respectfully requests that the §103 rejections be withdrawn.

New Claims

With respect to new claims 52-54, claims 52-54 depend from claim 50 and Applicant thus submits that claims 52-54 are allowable over the cited references for at least the reasons discussed above with respect to claim 50. Additionally, Applicant respectfully submits that the cited references do not further disclose wherein the network devices include devices to receive media content and devices to render media content as claimed in claim 52, wherein one of the plurality of smart cards is coupled to a device when the smart card is inserted into a smart card reader coupled to the device as claimed in claim 53, or wherein the plurality of

smart cards can be moved to different devices to alter the boundaries of the network as claimed in claim 54.

Conclusion

Claims 1-22, 24-46, 50, and 52-54 are in condition for allowance. Applicant respectfully requests reconsideration and issuance of the subject application. Should any matter in this case remain unresolved, the undersigned attorney respectfully requests a telephone conference with the Examiner to resolve any such outstanding matter.

Respectfully Submitted,

Date: __August 23, 2001__　　　　By: _____

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Version of Claims with Markings to Show Changes Made

16.   (Amended)   A method of encrypting media content <u>received at a user's home from a programming source</u>, the method comprising:

checking<u>, at the user's home,</u> whether a smart card is authorized to encrypt the media content; and

encrypting<u>, at the user's home,</u> the media content only if the smart card is authorized to encrypt the media content.

21.   (Amended)   A method of decrypting media content, the method comprising:

checking whether a smart card is authorized to decrypt the media content;

<u>determining that the smart card is authorized to decrypt the media content only if data other than electronic money is stored on the smart card, wherein the data is expected to be of value to a user;</u> and

decrypting the media content only if the smart card is authorized to decrypt the media content.

34.   (Amended)   A method of allowing parental control over media content, the method comprising:

comparing a rating corresponding to the media content to a rating associated with a smart card; and

allowing access to the media content if the rating corresponding to the media content does not exceed the rating associated with the smart card, wherein a plurality of ratings do not exceed the rating associated with the smart card.

50.   (Amended)   [A smart card as recited in claim 47,] A method of identifying boundaries of a network of devices, the method comprising:

encrypting media content based on an identifier corresponding to a plurality of smart cards; and

limiting rendering of the media content to a network of devices to which the plurality of smart cards are coupled, wherein the network of devices is maintained within a single house.